

Covered in this lecture:

What full stack JavaScript is

- ▶ Node.js is a system that allows you create an environment on your browser to test your JavaScript
- **JavaScript is now used as a front-end and back-end language**
- Using it for both could save time and eliminate the effort of learning other back-end languages
- ▶ Full stack JS has a lot of potential but it's still under development
- It might be inefficient and might actually take longer to write everything in it

See you next lecture!

Pair programming

LECTURE
SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

How pair programming works

- ▶ Instead of having one person program alone, you have two people standing one behind the other
- Two people will write one piece of code
- When two people work on it, you have less problems
- The process is slower
- ▶ Advantages:
 - The code quality improves
 - Developers learn from each other
- It's used mostly with big applications that have a long timeline
- ▶ It's better to do it slower but have a higher quality

See you next lecture!

Full stack design

LECTURE
SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

What a full stack designer does

- ▶ **Full stack designer = Graphic designer who can also program**
- There is a trend towards designers learning more about development
- ▶ The final product will have a better quality because they also understand what's happening behind the scenes, not just on the surface

See you next lecture!

Hybrid apps

LECTURE
SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

Pros and cons of hybrid apps

- ▶ There are three types of mobile apps:
 - Native app
 - written in the code of a specific operating system
 - Web app
 - a website that is redesigned to work on a smaller screen
 - Hybrid app
 - designed to work on all the operating systems
- ▶ Advantage:
 - Hybrid apps help save time and money
- ▶ Downsides:
 - Loss of interactivity
 - Loss of core functions and harder to control
- Native apps: Facebook, Twitter
- Hybrid apps: Netflix

See you next lecture!

Responsive design

LECTURE
SUMMARY

PRE-PROGRAMMING

Covered in this lecture:

What it is and why we use it

- ▶ Nowadays, phones and computers come in a lot of different sizes
- You have to make sites that look good on all resolutions
- ▶ **Responsive design is a design that detects the size of the screen and adapts all the elements on the app to that resolution**
- You have to decide what gets displayed on lower resolutions
- ▶ Usually, responsive design has a lot of white space on the sides that allows it to contract without losing elements
- The elements of the site have a relative position (floating)
- You need to run a lot of bug testing on different resolutions and browsers

See you next lecture!

Covered in this lecture:

What they are and how they work

- "In the cloud" = Stored and accessed on a different device or server than the device you're using
- People use cloud storage in order to have access to their files at all times

▶ **#1 SaaS = Software as a Service**

Products become services by providing a web version

You pay per month and you login to use the online app

Advantages:

- You charge less, but more often, and for longer
- People can access files everywhere
- Continuous updating

▶ **#2 PaaS = Platform as a Service**

A platform is a set of tools, resources, and software that come together to let you build software on top of it

- Example: creating games on Facebook

▶ **#3 IaaS = Infrastructure as a Service**

IaaS is what holds up and contains whatever you're building

Web storage is an IaaS

IaaS systems offer:

- Security and firewalling
- Routing and network services
- Maintenance and load balancing

- SaaS runs on PaaS, which runs on an IaaS - like a stack

See you next lecture!

Covered in this lecture:

What Swift is

- ▶ **Swift is a new programming language designed by Apple specifically for their operating systems**
- In the past, you would build iOS apps in Objective C, which is harder to learn and more strict
- Currently you can make an app in either of them
- ▶ Swift is safer to use, fun, and faster
- Swift is not just for iOS, it also works for Apple Watch, TVOS, Mac OS
- ▶ Apple wanted to accelerate the developer community for their system by creating Swift
- ▶ Swift is not that easy to learn

See you next lecture!